

This listing of claims will replace all prior versions, and listings, of claims in the application

LISTING OF CLAIMS

18. (currently amended) A surface-mounted LED arrangement,
5 comprising:
a printed circuit board having a principal surface and a secondary surface,
said printed circuit board comprising a plastic material,
a plurality of LEDs arranged on said principal surface,
a metallic layer provided on said secondary surface electrically insulated
10 from the LEDs, and
a cooling member connected to said secondary surface, wherein said
printed circuit board is secured to said cooling member with at least
one of a thermally conductive paste, a thermally conductive
adhesive and [or] a thermally conductive film.

15

19. (previously added) The LED arrangement according to claim 18,
wherein said metallic layer comprises copper or other metal having good thermal
conductivity.

20. (currently amended) The LED arrangement according to claim 19,
wherein said printed circuit board comprises a flexible printed circuit board
structure, ~~particularly a flex board~~.

21. (currently amended) A surface-mounted LED arrangement.
25 comprising:
a printed circuit board having a principal surface and a secondary surface,
said printed circuit board comprising a plastic material,

a plurality of LEDs arranged on said principal surface,

a metallic layer provided on said secondary surface, and

5 a cooling member connected to said secondary surface, wherein said printed circuit board is secured to said cooling member with at least one of a thermally conductive paste, a thermally conductive adhesive and a thermally conductive film;

wherein said metallic layer comprises copper or other metal having good thermal conductivity;

10 wherein said printed circuit board comprises a flexible printed circuit board structure; and

*B1
amp.*
15 ~~The LED arrangement according to claim 20,~~ wherein said secondary surface ~~side~~ is applied to one of a curved surface, a singly angled surface or a multiply angled surface of said cooling member, or to a thermally conductive partial region of a device housing, or to an automobile chassis, such that said plurality of LEDs are arranged in a spatial form determined by said one of a curved surface, singly angled surface or multiply angled surface of said cooling member.

20 22. (previously added) The LED arrangement according to claim 21, wherein said metallic layer comprises a meander-like lateral structure.

23. (currently amended) The LED arrangement according to claim 22, wherein said cooling member comprises a metal ~~, particularly copper or aluminum or sheet metal.~~

25

24. (previously added) The LED arrangement according to claim 23, wherein a surface of said cooling member remotely positioned from said printed circuit board is blackened, comprises cooling ribs or is provided with a roughened surface.

25. (previously added) The LED arrangement according to claim 24, wherein said plurality of LEDs are provided with lenses.

5 26. (previously added) The LED arrangement according to claim 25, wherein said printed circuit board electrically insulates said metallic layer from said plurality of LEDs.

10 27. (currently amended) The LED arrangement according to claim 26, wherein said printed circuit board comprises one of an epoxy resin, a polyester or a polyamide, ~~preferably in the form of a polyester or polyamide film.~~

28. (previously added) A lighting device comprising the LED arrangement according to claim 27.

15


29. (previously added) The lighting device comprising an LED arrangement according to claim 28, wherein said lighting device is an exterior lighting fixture of a motor vehicle, and said cooling member comprises a curvature adapted to one of an outside contour of said motor vehicle or to a
20 partial surface region of an automobile chassis.

30. (previously added) The lighting device comprising an LED arrangement according to claim 29, wherein said LED arrangement is a rotating light, and said cooling member has a cylindrical hollow shape with said printed
25 circuit board applied to an outside wall thereof.

31. (currently amended) The lighting device according to claim 30, said plurality of LEDs that proceed axially are electrically combined into lanes ~~lines~~ that can be successively circumferentially operated.

5 32. (previously added) The lighting device having an LED arrangement according to claim 20, wherein said lighting device is an exterior lighting fixture of a motor vehicle, and said cooling member comprises a curvature adapted to one of an outside contour of a motor vehicle or to a partial surface region of an automobile chassis.

10

 33. (previously added) The lighting device according to claim 30, wherein said LED arrangement is a rotating light, and said cooling member has a cylindrical hollow shape with said printed circuit board applied to an outside wall thereof.

15

34. (previously added) The lighting device according to claim 33, wherein said plurality of LEDs that proceed axially parallel are electrically combined into lanes that can be successively circumferentially operated.

20 35. (new) The LED arrangement according to claim 20, wherein the flexible printed circuit board is a flex board.

36. (new) The LED arrangement according to claim 23, wherein said metal is selected from the group consisting of copper, aluminum, and sheet
25 metal.

Appl. No. 10/009,656

Reply to Office Action of May 19, 2003

B1
am.

37. (new) The LED arrangement according to claim 27, wherein said epoxy resin, polyester or polyamide is in the form of a polyester or polyamide film.